DOCKET FILE COPY ORIGINAL

HECEWED

MAY 2 2 1998

FRED IN THE SELECTION

Before the FEDERAL COMMUNICATIONS COMMISSION DEPART OF THE PROPERTY OF TH

Washington, DC 20554

0	~	•	_	 _	_	

In the Matter of)	URIGINAL
Advanced Television Systems and Their Impact Upon the Existing Television Broadcasting Service)))	MM Docket No. 87-268

To: The Commission - Mail Stop 1170

OPPOSITION TO DAVIS COMPANIES' PETITION FOR RECONSIDERATION

1. Montgomery Communications, Inc. ("Montgomery") hereby opposes the Petition for Reconsideration filed on April 20, 1998, 1/2 in the above-captioned proceeding by the Davis Companies ("Davis").²/ Montgomery is a mutually exclusive applicant with Davis Television, Topeka, LLC, for a construction permit for a new NTSC television Channel 43 at Topeka, Kansas. Davis seeks the substitution of Channel 55 for Channel 43 in Topeka, claiming that the use of Channel 43 is precluded by interference. Montgomery disagrees. Channel 43 is suitable for use at Topeka and is more suitable than Channel 55, among other reasons because Channel 55 is outside the "core" TV spectrum of Channels 2-51. Montgomery wishes to pursue its own application for Channel 43 and to operate a station on that channel and does not believe that there is any justification for substituting Channel 55.

No. of Copies rec'd UVU

^{1/} This Opposition is timely filed within 15 days of publication of notice of the Petition in the Federal Register.

^{2/} The Petitioners are Davis Television Pittsburgh, LLC, Davis Television Corpus Christi, LLC, Davis Television Topeka, LLC, and Davis Television Duluth, LLC. These companies are all apparently affiliated and filed a joint Petition for Reconsideration.

- 2. First, it is not clear that Davis has enough of a stake in the fate of Channel 43 for the Commission to entertain its petition. Davis' application has not even been accepted for filing, and it may never be accepted because it seeks a waiver of the freeze on acceptance of NTSC applications in the vicinity of major urban areas.³/
 The freeze was imposed to avoid interfering with the establishment of a digital television table of allotments for pre-existing stations. If Channel 43 is as unsuitable as Davis claims, then perhaps fulfillment of the purpose of the freeze dictates that the allotment be deleted altogether rather than changed to something entirely new, especially an out-of-core channel.⁴/
- 3. Changing an in-core allotment to an out-of-core allotment should be avoided whenever possible. It will be a particularly severe burden to a station in Topeka, a relatively small market, to construct on one channel only to have to change to another channel shortly afterwards. Since there is no separate digital allotment paired with Channel 43, any permittee in Topeka will have to decide whether to construct an NTSC or digital facility on Channel 55 and will then have to move to an in-core channel, which it may not be able to find. 5/ This is

^{3/ 52} Fed. Reg. 28346 (July 29, 1987).

 $[\]frac{4}{}$ Montgomery is not suggesting that it is not interested in constructing a station on Channel 43; and as indicated *infra*, it believes that Channel 43 is suitable for that purpose. The point is that even if Channel 43 is unsuitable, allotting Channel 55, an out-of-core channel, is not justified.

⁵/ If another in-core channel were available, Davis presumably would have proposed it now for use at Topeka.

a burden that the Commission should not impose, especially here, where engineering considerations dictate no need for it. $\frac{6}{}$

- 4. The only objection raised by Davis to the use of Channel 43 at Topeka is the proximity of a digital allotment on Channel 39 in Lawrence, Kansas. Davis's showing relies entirely on mileage separation requirements. But as explained in Montgomery's attached Engineering Statement, mileage separations are used only to evaluate proposals for new allotments and were not the basis for developing the initial digital table. In fact, there are three other digital allotments to which Channel 43 at Topeka would cause interference; but in all cases, the Channel 43 allotment complies with the 2%/10% criteria in Section 73.622(f)(5) of the Commission's Rules and thus is not a defective allotment. Moreover, while an NTSC facility on Channel 43 at Topeka would also receive interference from two NTSC and six digital allotments, that interference does not exceed criteria used elsewhere in the digital table.
- 5. In sum, the Channel 43 allotment at Topeka falls within established interference criteria, so that channel is suitable for NTSC use. Montgomery stands ready and willing to compete with Davis, including in an auction, to become a permittee on that channel. $\frac{9}{}$

 $[\]underline{6}$ / Davis recognizes that its proposal is out-of-core but argues that the prompt initiation of service to the public justifies the allotment. Davis Petition at p. 6, fn. 6. Montgomery demonstrates in this Opposition, however, that service can be initiated just as promptly on Channel 43, which negates Davis's justification for going out-of-core.

^{7/} Davis Engineering Statement at p. 2.

 $[\]underline{8}$ / This analysis is based on the specific facilities proposed in Davis's Topeka application.

 $[\]underline{9}$ / Thus if Davis does not want it, Montgomery would be happy to be awarded a construction permit for Channel 43.

Accordingly, there is no reason to change the allotment at all, let alone substitute an out-of-core channel; $\frac{10}{}$ and the allotment should be left undisturbed.

Irwin, Campbell & Tannenwald, P.C. 1730 Rhode Island Ave., N.W., Suite 200 Washington, DC 20036-3101 Tel. 202-728-0400 Fax 202-728-0354

Peter Tannenwald

Respectfully submitted.

May 22, 1998

Counsel for Montgomery Communications, Inc.

CERTIFICATE OF SERVICE

I, Laura Ann Campbell, do hereby certify that I have, this 22nd day of May, 1998, caused to be sent by first class United States mail, postage prepaid, copies of the foregoing "Opposition to Davis Petition for Reconsideration" to the following:

Dennis P. Corbett, Esq. Leventhal, Senter & Lerman, P.L.L.C. 2000 K St., N.W., Suite 600 Washington, DC 20006-1809 Counsel for the Davis Companies

Laura Ann Campbell

^{10/} Davis's attack on the acceptability of Montgomery's application (Petition, p. 6, fn. 6) is out of place in this proceeding. Davis and Montgomery have already debated the impact of the Balanced Budget Act on their respective applications in filings in MM Docket No. 97-234, addressing competitive bidding issues. In that proceeding, the Commission correctly concluded that statutory considerations preclude the grant of any singleton application filed before July 1, 1997. Thus Davis and Montgomery should be subject to competitive bidding for Channel 43. Davis's argument in favor of an immediate grant is obviously self-serving and would give Davis a windfall in several markets because it had the funds to speculate on a large number of applications filed at the last minute and in the face of a freeze. Montgomery, in contrast, is a relatively small business, locally owned and operated, seeking to continue an established track record of service as a low power television operator in the Topeka market, where it provides the only Fox Television Network service in the Topeka ADI. If there is a public interest argument to be made in favor of an immediate grant of an application, it favors Montgomery's application, rather than that of a distant applicant with no local track record.

ENGINEERING STATEMENT IN
SUPPORT OF OPPOSITION TO
PETITION FOR RECONSIDERATION
MM DOCKET 87-268

ANALOG CHANNEL 43 - TOPEKA, KS

Montgomery Communications, Inc. Topeka, KS

May 19, 1998

Prepared For: Mr. Robert Raff

Montgomery Communications, Inc.

222 W. Sixth Street Junction City, KS 66441

CARL E. SMITH CONSULTING ENGINEERS

CONTENTS

Title Page

Contents

Engineering Affidavit

Roy P. Stype, III

Engineering Statement

Table 1.0 (a) - KSHB-DT Interference Studies (Without Channel 43 - Topeka, KS)

Table 1.0 (b) - KSHB-DT Interference Studies (With Channel 43 - Topeka, KS)

Table 1.1 (a) - KPTM-DT Interference Studies (Without Channel 43 - Topeka, KS)

Table 1.1 (b) - KPTM-DT Interference Studies (With Channel 43 - Topeka, KS)

Table 1.2 (a) - KODE-DT Interference Studies (Without Channel 43 - Topeka, KS)

Table 1.2 (b) - KODE-DT Interference Studies (With Channel 43 - Topeka, KS)

Table 1.3 - Summary of Interference Studies to DTV Facilities for Proposed Channel 43 Analog Facilities in Topeka, KS

Table 2.0 - Interference Studies Channel 43 - Topeka, KS

Fig. 2.0 - Interference Studies Channel 43 - Topeka, KS

Table 2.1 - Summary of Interference Studies Channel 43 - Topeka, KS

- CARL E. SMITH CONSULTING ENGINEERS -

ENGINEERING AFFIDAVIT

State of Ohio)	
)	SS
County of Summit)	

Roy P. Stype, III, being duly sworn, deposes and states that he is a graduate Electrical Engineer, a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Montgomery Communications, Inc., to prepare the attached "Engineering Statement In Support Of Opposition To Petition For Reconsideration - Analog Channel 43 - Topeka, KS."

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.

Roy P Stype, III

Subscribed and sworn to before me on May 19, 1998.

Notary Public

GAIL M. ELROD, Notary Public Residence - Summit County State Wide Jurisdiction, Ohio My Commission Expires May 28, 2002

/SEAL/

ENGINEERING STATEMENT

This engineering statement is prepared on behalf of Montgomery

Communications, Inc., applicant for a construction permit for a new analog television station on Channel 43 in Topeka, Kansas. It supports an opposition to a petition for reconsideration filed by Davis Television Topeka, LLC, a competing applicant for Channel 43 in Topeka, and related companies, of the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket 87-268, the DTV allotment proceeding. This engineering statement addresses only the portion of the Davis petition for reconsideration which deals with the vacant analog allotment on Channel 43 in Topeka, Kansas, for which Davis and Montgomery are both applicants.

The premise of this petition for reconsideration is that the DTV allotments made in this Reconsideration Order conflict with analog Channel 43 in Topeka, rendering it incapable of being utilized for analog TV operation. As a result, this petition for reconsideration requests that analog Channel 55, which is located outside the core spectrum, be substituted for analog Channel 43 in Topeka. The sole basis, however, for the claim that Channel 43 in Topeka has been rendered unusable by the DTV allotments outlined in the revised DTV Table of Allotments is that Channel 43 in Topeka fails to comply with the spacing requirements outlined in Section 73.623(d)(1) of the FCC Rules with respect to the DTV allotment on Channel 36 for KMCI - Lawrence, Kansas. These spacing requirements, however, are only applicable to proposals to add new allotments to the DTV Table of Allotments, and were not utilized in developing the initial DTV allotments to be paired with existing analog stations. Thus, this spacing situation with regard to KMCI, standing alone, does not render the

 CARL	F	SMITH	CONSULTING	FNGINEERS	
 CARL	<u> </u>	-3 MII I H	CONSULTING	LINGUIAFEKS	

analog allotment on Channel 43 in Topeka unusable. Instead, it is necessary to conduct interference studies, utilizing the procedures outlined in FCC OET Bulletin 69 to evaluate the compatibility of analog Channel 43 in Topeka with the revised DTV Table of Allotments.

Studies were first conducted, utilizing the procedures outlined in OET Bulletin 69, to evaluate the predicted interference from the facilities proposed in the Davis application (BPCT-960920LZ) for Channel 43 in Topeka to DTV allotments contained in this revised table. No interference studies were conducted with regard predicted interference to other analog facilities, as compliance with the spacing requirements outlined in Section 73.610 of the FCC Rules is the only criteria which must be met to comply with the protection requirements to other analog facilities. These interference studies found that the analog facilities proposed in the Davis application would be predicted to cause interference to the facilities specified in three DTV allotments:

KSHB-DT	Kansas City, MO	Channel 42
KPTM-DT	Omaha, NE	Channel 43
KODE-DT	Joplin, MO	Channel 43

Table 1.0(a) presents the results of these interference studies for the KSHB-DT allotment without considering the facilities proposed in Davis' application for Channel 43 in Topeka, while Table 1.0(b) presents the results of similar studies which also consider Davis' proposed Channel 43 facilities in Topeka. Similarly, Tables 1.1(a) and 1.1(b) present the results of these interference studies for the KPTM-DT allotment and Tables 1.2(a) and 1.2(b) present the results of these studies for the KODE-DT allotment.

Table 1.3 presents a summary of the population data extracted from these interference studies. As shown in this table, the use of the Channel 43 facilities proposed in Davis' application for Channel 43 in Topeka will not cause new

interference to more than 2% of the population predicted to receive noise limited service from the facilities authorized by any of these three DTV allotments.

Furthermore, the addition of these Channel 43 analog facilities will not result in the total population predicted to receive interference for any of these DTV allotments exceeding 10% of the total population predicted to receive noise limited service. Accordingly, the Channel 43 facilities proposed in Davis' Topeka application comply with the 2%/10% de minimis interference criteria outlined in Section 73.622(f)(5) of the FCC Rules with regard to all DTV allotments. Thus, this de minimis interference to these three DTV allotments should not preclude the activation of analog operation on Channel 43 in Topeka. Based on the above information, the Channel 43 analog allotment in Topeka, Kansas, has not been rendered unusable on the basis of interference caused to DTV facilities.

Further studies were also conducted, again utilizing the methodology outlined in OET Bulletin 69, to evaluate the predicted interference to the facilities proposed in Davis' application for Channel 43 in Topeka from both analog and DTV facilities.

These studies assumed that all DTV facilities would operate with the facilities authorized by their DTV allotments, including the appropriate directional pattern associated with each allotment. The results of these studies are depicted in Table 2.0 and Figure 2.0. Table 2.1 presents a summary of the population data from this study.

These studies show that the facilities proposed in this application are presently predicted to receive interference from two other analog facilities, in spite of the fact that the spacing requirements to these other analog facilities are fully met:

KSHB-TV Kansas City, MO Channel 41 KYFC Kansas City, MO Channel 50

CARL E. SMITH CONSULTING ENGINEERS

This interference would impact 4511 persons, or 0.99% of the population within the Grade B contour for these facilities which is predicted to receive a signal of 64 dBu or greater. These studies also show that six DTV allotments would be predicted to cause interference to these Channel 43 analog facilities in areas which are predicted to receive an interference free signal of at least 64 dBu when only other analog facilities are considered:

WIBW-DT	Topeka, KS	Channel 44
KMCI-DT	Lawrence, KS	Channel 36
KSHB-DT	Kansas City, MO	Channel 42
KSMO-DT	Kansas City, MO	Channel 47
KPTM-DT	Omaha, NE	Channel 43
KODE-DT	Joplin, MO	Channel 43

As shown in Table 2.1, this additional DTV interference would impact 45,584 persons, or 10.00% of the population within the Grade B contour for these facilities which is predicted to receive a signal of 64 dBu or greater.

This interference received does not render Channel 43 in Topeka unusable for analog operation, however, as there are several existing analog facilities listed in Appendix B of the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket 87-268 as receiving 10%, or more, new interference as a result of the DTV allotments adopted in this document. Thus, the predicted DTV interference to the facilities specified in Davis' application for Channel 43 in Topeka falls within the range which the FCC found acceptable to existing analog facilities in generating this DTV Table of Allotments.

Table 2.1 also shows a summary of the population within the Topeka DMA for which interference would be predicted to the facilities specified in the Davis application.

As shown in this table, only 17,965 persons, or 5.47% of the population in this DMA predicted to receive at least 64 dBu service from these proposed facilities would

receive interference from allotments contained in the revised DTV Table of Allotments.

This makes it obvious that the majority of this received interference lies at locations outside the Topeka DMA, reducing its significance.

The information outlined above clearly shows that the revised DTV allotments made in the Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket 87-268 have clearly not rendered the analog allotment on Channel 43 in Topeka, Kansas, unusable, as claimed in the Davis petition for reconsideration. The facilities proposed in the Davis application for this allotment comply with the 2%/10% de minimis standard outlined in Section 73.622(f)(5) of the FCC Rules with regard to interference caused to DTV allotments. Furthermore, the new interference to the facilities proposed in the Davis application as the result of these DTV allotments falls within the range of values which the FCC found acceptable in generating this DTV Table of Allotments. Thus, if it is decided to grant Davis' request for a waiver of the filing freeze, maintaining this allotment on Channel 43 is the preferred alternative, as substituting an out of core channel, such as Channel 55, would require a future reallotment of this facility to a core channel following the completion of the DTV transition in order to permit continued operation, in the DTV mode, by a station occupying this allotment, due to the fact that there is no paired DTV allotment for analog Channel 43 in Topeka.

TABLE 1.0 (a)

KSHB-DT INTERFERENCE STUDIES (WITHOUT CHANNEL 43 - TOPEKA, KS)

Montgomery Communications, Inc. Topeka, KS

Message Segment (/taservice/restart/RS209May1598D.desc):
NTSC/DTV Interference study /taservice/restart/RS209May1598D.desc
Desired Station Name: DKSHBTV Station Type: HDTV
City: KANSAS CIT State: MO Channel: 42
Undesired Station 1 Name: KSHBTV Station Type: NTSC
City: KANSAS CIT State: MO Channel: 41 km: .0 mi: .0 bear: .0
Undesired Station 4 Name: KPTM Station Type: NTSC
City: OMAHA State: NE Channel: 42 km:261.8 mi:162.7 bear:328.6
Undesired Station 6 Name: KTFO Station Type: NTSC
City: TULSA State: OK Channel: 41 km:351.9 mi:218.7 bear:195.7
Undesired Station 2 Name: DKODETV Station Type: HDTV
City: JOPLIN State: MO Channel: 43 km:221.9 mi:137.9 bear:178.6
Undesired Station 3 Name: DKPTM Station Type: HDTV
City: OMAHA State: NE Channel: 43 km:261.8 mi:162.7 bear:328.6
Undesired Station 5 Name: DKTFO Station Type: HDTV
City: TULSA State: OK Channel: 42 km:351.9 mi:218.7 bear:195.7
Undesired Station 7 Name: DKJMH Station Type: HDTV
City: BURLINGTON State: IA Channel: 41 km:353.0 mi:219.3 bear: 55.4
Undesired Station 8 Name: DKTVITV Station Type: HDTV
City: ST. LOUIS State: MO Channel: 43 km:370.5 mi:230.2 bear: 97.9
Stations that actually do contribute to interference.
Name NTSC Int Nonmasked HDTV Int Population Total Area of Int Popu
lation
KPTM 200.65 sq km .00 sq km 2700. 200.65 sq km
2700.

Population breakdown by State and County

Contour 1	Signal below minimum	
STATE = IA	POPULATION	AREA(km)
Appanoose County	1082.	223.08
Davis County	49.	21.69
Decatur County	2792.	237.75
Fremont County	449.	191.56
Page County	932.	213.36
Ringgold County	438.	252.97
Taylor County	591.	283.41
Wayne County	492.	241.41
State total =		6824. 1665.23
STATE = KS	POPULATION	AREA(km)
Allen County	13996.	1123.67
Anderson County	7865.	1457.38
Atchison County	3915.	728.24
Bourbon County	14932.	1500.98
Brown County	10676.	1344.32
Butler County	709.	481.07
Chase County	2239.	1023.19
Coffey County	7802.	1552.23
Cowley County	1.	1.32

Crawford County	7773.	768.10
Doniphan County	6449.	943.48
Douglas County	1669.	297.84
Elk County	337.	458.94
Franklin County	20892.	1285.70
Geary County	189.	179.11
Greenwood County	7979.	2906.68
Jackson County	11733.	1637.27
Jefferson County	8312.	587.34
Linn County	9028.	1563.56
Lyon County	33721.	2141.24
Marshall County	4385.	1507.76
Miami County	3856.	356.06
Morris County	4225.	806.15
Nemaha County	10310.	
Neosho County	15033.	1014.64
Osage County	17999.	1773.06
Pottawatomie County	16746.	2007.23
Riley County	41456.	
Shawnee County	165463.	1490.08
Wabaunsee County	7664.	
Wilson County	5943.	1029.30
Woodson County	4205.	
<pre>State total =</pre>	467	7506. 37775.14
STATE = MO	POPULATION	• •
	15650	716 20
Adair County	15653.	746.39
Adair County Andrew County	15653. 14456.	1055.39
-	14456. 8383.	1055.39 1333.55
Andrew County	14456. 8383. 5661.	1055.39 1333.55 704.53
Andrew County Atchison County	14456. 8383. 5661. 14910.	1055.39 1333.55 704.53 1998.13
Andrew County Atchison County Barton County Bates County Benton County	14456. 8383. 5661. 14910. 16196.	1055.39 1333.55 704.53 1998.13 1825.42
Andrew County Atchison County Barton County Bates County Benton County Boone County	14456. 8383. 5661. 14910. 16196. 36.	1055.39 1333.55 704.53 1998.13 1825.42 .19
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County	14456. 8383. 5661. 14910. 16196. 36. 69713.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County Chariton County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cars County Chariton County Clinton County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County Chariton County Cooper County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cedar County Chariton County Clinton County Cooper County Dade County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Carroll County Cedar County Chariton County Clinton County Cooper County Dade County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Carroll County Chariton County Chariton County Cooper County Dallas County Daviess County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County Chariton County Clinton County Cooper County Dade County Daviess County DeKalb County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862. 15429.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37 1097.75
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County Chariton County Clinton County Cooper County Dade County Dallas County Dekalb County Gentry County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862. 15429. 6961.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37 1097.75 1264.54
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Carroll County Chariton County Chariton County Clinton County Dade County Date County Daviess County Dekalb County Gentry County Grundy County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862. 15429. 6961. 9877.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37 1097.75 1264.54 997.29
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Carroll County Chariton County Chariton County Clinton County Dallas County Dallas County Daviess County Dekalb County Gentry County Grundy County Harrison County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862. 15429. 6961. 9877. 8180.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37 1097.75 1264.54 997.29 2014.17
Andrew County Atchison County Barton County Bates County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Carroll County Chariton County Chariton County Clinton County Dade County Date County Daviess County Dekalb County Gentry County Grundy County	14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862. 15429. 6961. 9877.	1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37 1097.75 1264.54 997.29

TABLE 1.0 (a) Cont'd

Holt County	5416.		
Howard County	10267.		
Johnson County	37748.		
Laclede County	26021.		
Lafayette County	12881.	770.41	
Linn County	13648.	1475.39	
Livingston County	15120.	1453.34	
Macon County	3248.	1063.57	
Mercer County	4804.	1236.93	
Miller County	8816.	271.50	
Moniteau County	6833.	465.05	
Morgan County	19810.	1534.85	
Nodaway County	21806.	2305.03	
Pettis County	40816.		
Polk County	20974.		
Putnam County	4623.		
Randolph County		433.32	
Ray County	873.		
St. Clair County	9660.		
Saline County	23126.		
Schuyler County		315.59	
Sullivan County	7154.		
Vernon County		2298.78	
Worth County	2503.		
State total =		33797. 570)47.55
STATE = NE	POPULATION		, , , , , ,
		739.96	
Gage County		890.15	
Johnson County		158.58	
Lancaster County	7617.		
Nemaha County	2789.		
Otoe County	3347.		
Pawnee County	9855.		
Richardson County			260 06
State total =		31969. 63	95. 104704.38
Total Population/Area	a for this contour:	11400	777. 104704.50
	T-+		
Contour 2	Interference	7 DE7 / bm \	
STATE = KS	POPULATION	AREA(km) 7.73	
Atchison County	9.		
Douglas County	62.		
Jefferson County	776.	49.49	
Leavenworth County	0.		£1 25
State total =		847.	61.35
STATE = MO	POPULATION	AREA(km)	
Buchanan County	4902.		
Caldwell County	25.		
Clinton County	43.		
DeKalb County	5.		
Johnson County	63.		
Lafayette County	71.	8.43	

TABLE 1.0 (a) Cont'd

```
.93
                                     10.
  Platte County
                                     81.
                                              21.18
 Ray County
                                         5200.
                                                 121.52
  State total =
                                                            198.82
                                                  6048.
Total Population/Area for this contour:
                    No Interference
Contour 3
                                           AREA (km)
 STATE = KS
                             POPULATION
                                             219.05
                                  11545.
  Atchison County
                                             2.23
  Doniphan County
                                      0.
                                  88491.
                                             795.94
  Douglas County
                                             200.74
  Franklin County
                                   1095.
                                            736.75
  Jefferson County
                                   8623.
                                            1191.08
                                 395778.
  Johnson County
                                 62347.
                                            1221.52
  Leavenworth County
                                            1115.25
                                  25603.
 Miami County
 Wyandotte County
                                 153931.
                                             416.73
                                       747414.
                                                 5899.27
  State total =
                                          AREA(km)
                             POPULATION
 STATE = MO
                                    498.
                                             98.25
  Bates County
                                             611.93
 Buchanan County
                                   8863.
                                            169.93
                                   1514.
 Caldwell County
 Cass County
                                  66081.
                                           1674.19
 Clay County
                                            929.69
                                 164043.
  Clinton County
                                  13601.
                                            994.66
                                             19.22
                                    165.
  DeKalb County
                                 669707.
                                         1600.19
  Jackson County
                                  9573.
                                            767.70
  Johnson County
 Lafayette County
                                            845.66
                                  19781.
 Platte County
                                  90470.
                                           1280.18
                                          1266.03
                                  25659.
 Ray County
                                      1069953. 10257.63
 State total =
                                               1817366. 16432.07
Total Population/Area for this contour:
 Signal below minimum
Area: 104700. sq km
Population:
              1140000.
Households:
               394000.
 Interference
Area:
        200. sq km
Population:
                 6000.
                 2000.
Households:
No Interference
         16430. sq km
Area:
Population: 1817000.
```

Households: 604000.

TABLE 1.0 (b)

KSHB-DT INTERFERENCE STUDIES (WITH CHANNEL 43 - TOPEKA, KS)

Montgomery Communications, Inc. Topeka, KS

Message Segment (/taservice/restart/RS209May1598E.desc):
NTSC/DTV Interference study /taservice/restart/RS209May1598E.desc
Desired Station Name: DKSHBTV Station Type: HDTV
City: KANSAS CIT State: MO Channel: 42
Undesired Station 1 Name: KSHBTV Station Type: NTSC
City: KANSAS CIT State: MO Channel: 41 km: .0 mi: .0 bear: .0
Undesired Station 2 Name: NEW Station Type: NTSC
City: TOPEKA State: KS Channel: 43 km:114.6 mi: 71.2 bear:267.8
Undesired Station 5 Name: KPTM Station Type: NTSC
City: OMAHA State: NE Channel: 42 km:261.8 mi:162.7 bear:328.6
Undesired Station 7 Name: KTFO Station Type: NTSC
City: TULSA State: OK Channel: 41 km:351.9 mi:218.7 bear:195.7
Undesired Station 3 Name: DKODETV Station Type: HDTV
City: JOPLIN State: MO Channel: 43 km:221.9 mi:137.9 bear:178.6
Undesired Station 4 Name: DKPTM Station Type: HDTV
City: OMAHA State: NE Channel: 43 km:261.8 mi:162.7 bear:328.6
Undesired Station 6 Name: DKTFO Station Type: HDTV
City: TULSA State: OK Channel: 42 km:351.9 mi:218.7 bear:195.7
Undesired Station 8 Name: DKJMH Station Type: HDTV
City: BURLINGTON State: IA Channel: 41 km:353.0 mi:219.3 bear: 55.4
Undesired Station 9 Name: DKTVITV Station Type: HDTV
City: ST. LOUIS State: MO Channel: 43 km:370.5 mi:230.2 bear: 97.9
Stations that actually do contribute to interference.
Name NTSC Int Nonmasked HDTV Int Population Total Area of Int Popu
lation
NEW 21.31 sq km .00 sq km 306. 21.31 sq km
306.
KPTM 200.65 sq km .00 sq km 2700. 200.65 sq km
2700.

Population breakdown by State and County

Contour 1	Signal below minimum		
STATE = IA	POPULATION	AREA(km)	
Appanoose County	1082.	223.08	
Davis County	49.	21.69	
Decatur County	2792.	237.75	
Fremont County	449.	191.56	
Page County	932.	213.36	
Ringgold County	438.	252.97	
Taylor County	591.	283.41	
Wayne County	492.	241.41	
State total =		6824. 1665.23	
STATE = KS	POPULATION	AREA(km)	
Allen County	13996.	1123.67	
Anderson County	7865.	1457.38	
Atchison County	3915.	728.24	
Bourbon County	14932.	1500.98	
Brown County	10676.	1344.32	

Butler County	709.	481.07
Chase County	2239.	1023.19
Coffey County	7802.	
Cowley County	1.	1.32
Crawford County	7773.	
Doniphan County		943.48
Douglas County	1669.	297.84
Elk County	337.	458.94
Franklin County	20892.	1285.70
Geary County	189.	179.11
Greenwood County		2906.68
Jackson County	11733.	
Jefferson County		587.34
Linn County	9028.	
Lyon County	33721.	2141.24
Marshall County	4385.	
-	3856.	
Miami County		806.15
Morris County	10310.	
Nemaha County	15033.	1014.64
Neosho County	17999.	1773.06
Osage County		2007.23
Pottawatomie County		327.94
Riley County		
Shawnee County		1490.08 2217.45
Wabaunsee County	/004.	2211.43
-		
Wilson County	5943.	1029.30
Wilson County Woodson County	5943. 4205.	1029.30 1378.24
Wilson County Woodson County State total =	5943. 4205. 467	1029.30 1378.24 7506. 37775.14
Wilson County Woodson County State total = STATE = MO	5943. 4205. 467 POPULATION	1029.30 1378.24 7506. 37775.14 AREA(km)
Wilson County Woodson County State total = STATE = MO Adair County	5943. 4205. 467 POPULATION 15653.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39
Wilson County Woodson County State total = STATE = MO Adair County Andrew County	5943. 4205. 467 POPULATION 15653. 14456.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County	5943. 4205. 467 POPULATION 15653. 14456. 8383.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Boone County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Buchanan County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Caldwell County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Caldwell County Camden County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Caldwell County Camden County Carroll County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1925.42 .19 382.39 803.44 1280.88 1650.18
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Caldwell County Camden County Carroll County Cass County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Barton County Benton County Benton County Boone County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Boone County Caldwell County Canden County Carroll County Cass County Cedar County Chariton County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Camden County Carroll County Cass County Cedar County Chariton County Clinton County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1925.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Camden County Carroll County Carroll County Cass County Chariton County Clinton County Cooper County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Canden County Carroll County Carroll County Chariton County Chariton County Cooper County Dade County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Canden County Carroll County Carroll County Cass County Chariton County Clinton County Cooper County Dallas County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Canden County Carroll County Carroll County Chariton County Chariton County Cooper County Dade County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263. 7862.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16 1377.37
Wilson County Woodson County State total = STATE = MO Adair County Andrew County Atchison County Barton County Bates County Benton County Benton County Buchanan County Caldwell County Canden County Carroll County Carroll County Cass County Chariton County Clinton County Cooper County Dallas County	5943. 4205. 467 POPULATION 15653. 14456. 8383. 5661. 14910. 16196. 36. 69713. 6652. 28300. 9464. 537. 12440. 8549. 598. 14438. 1263. 13263.	1029.30 1378.24 7506. 37775.14 AREA(km) 746.39 1055.39 1333.55 704.53 1998.13 1825.42 .19 382.39 803.44 1280.88 1650.18 103.30 1133.82 1877.76 78.76 1297.16 398.06 1206.16

Grundy County	9877. 997.29		
Harrison County	8180. 2014.17		
Henry County	17954. 1855.00		
Hickory County	8462. 1069.42		
Holt County	5416. 1211.91		
Howard County	10267. 976.44		
Johnson County	37748. 1289.74		
Laclede County	26021. 1100.91		
Lafayette County	12881. 770.41		
Linn County	13648. 1475.39		
Livingston County	15120. 1453.34		
Macon County	3248. 1063.57		
Mercer County	4804. 1236.93		
Miller County	8816. 271.50		
Moniteau County	6833. 465.05		
Morgan County	19810. 1534.85		
Nodaway County	21806. 2305.03		
Pettis County	40816. 1929.28		
Polk County	20974. 1378.72		
Putnam County	4623. 1275.33		
Randolph County	1058. 433.32		
Ray County	873. 270.90		
	9660. 1889.89		
St. Clair County	23126. 2013.77		
Saline County			
Schuyler County	1423. 315.59		
Sullivan County	7154. 1762.95		
Vernon County	19930. 2298.78		
Worth County	2503. 772.90		
State total =	633797. 57047.55		
STATE = NE	POPULATION AREA(km)		
Gage County	2302. 739.96		
Johnson County	4432. 890.15		
Lancaster County	1626. 158.58		
Nemaha County	7617. 977.05		
Otoe County	278 9 . 866.10		
Pawnee County	3347. 1181.57		
Richardson County	9855. 1555.54		
State total =	31969. 6368.96		
Total Population/Area	a for this contour: 1140095. 104704.38		
Contour 2	Interference		
STATE = KS	POPULATION AREA(km)		
Atchison County	9. 7.73		
Douglas County	62. 3.95		
Jefferson County	797. 52.02		
Leavenworth County	019		
State total =	869. 63.88		
STATE = MO	POPULATION AREA(km)		
Buchanan County	4902. 62.92		
Caldwell County	25. 6.79		
4			

TABLE 1.0 (b) Cont'd

```
5.86
                                      43.
  Clinton County
                                                .84
                                       5.
  DeKalb County
                                      63.
                                               14.58
  Johnson County
  Lafayette County
                                      71.
                                               8.43
                                      10.
                                                .93
  Platte County
 Ray County
                                               21.18
                                      81.
                                          5200.
                                                  121.52
  State total =
                                                             201.35
Total Population/Area for this contour:
                                                   6069.
                    No Interference
Contour 3
                              POPULATION
                                            AREA (km)
 STATE = KS
                                              219.05
                                   11545.
  Atchison County
                                                2.23
                                       0.
  Doniphan County
                                              795.94
                                   88491.
  Douglas County
  Franklin County
                                   1095.
                                              200.74
                                    8602.
                                             734.22
  Jefferson County
                                             1191.08
  Johnson County
                                  395778.
                                             1221.52
  Leavenworth County
                                  62347.
  Miami County
                                   25603.
                                             1115.25
  Wyandotte County
                                  153931.
                                             416.73
                                        747392.
                                                   5896.74
  State total =
                             POPULATION AREA(km)
 STATE = MO
                                     498.
                                              98.25
  Bates County
                                              611.93
                                    8863.
  Buchanan County
                                             169.93
                                    1514.
  Caldwell County
                                           1674.19
                                  66081.
  Cass County
 Clay County
                                  164043.
                                            929.69
                                            994.66
  Clinton County
                                  13601.
                                              19.22
  DeKalb County
                                     165.
                                 66<del>9</del>707.
                                             1600.19
  Jackson County
  Johnson County
                                   9573.
                                            767.70
                                   19781.
                                            845.66
 Lafayette County
 Platte County
                                   90470.
                                             1280.18
 Ray County
                                   25659.
                                             1266.03
  State total =
                                       1069953.
                                                  10257.63
                                               1817345. 16429.58
Total Population/Area for this contour:
 Signal below minimum
Area: 104700. sg km
Population:
             1140000.
Households:
               394000.
 Interference
Area:
           200. sq km
Population:
                 6000.
Households:
                 2000.
No Interference
Area: 16430. sq km
Population: 1817000.
```

Households:

604000.

TABLE 1.1 (a)

KPTM-DT INTERFERENCE STUDIES (WITHOUT CHANNEL 43 - TOPEKA, KS)

Montgomery Communications, Inc. Topeka, KS

Topona, no			
Message Segment (/taservice/restart/RS209May1598F.desc):			
NTSC/DTV Interference study /taservice/restart/RS209May1598F.desc			
Desired Station Name: DKPTM Station Type: HDTV			
City: OMAHA State: NE Channel: 43			
Undesired Station 1 Name: KPTM Station Type: NTSC			
City: OMAHA State: NE Channel: 42 km: .0 mi: .0 bear: .0			
Undesired Station 2 Name: SIOU44 Station Type: NTSC			
City: SIOUX CITY State: IA Channel: 44 km:168.6 mi:104.8 bear: .1			
Undesired Station 6 Name: KRWF Station Type: NTSC			
City: REDWOOD FA State: MN Channel: 43 km:384.1 mi:238.6 bear: 8.7			
Undesired Station 3 Name: DWIBWTV Station Type: HDTV			
City: TOPEKA State: KS Channel: 44 km:230.1 mi:142.9 bear:176.2			
Undesired Station 4 Name: DKSHBTV Station Type: HDTV			
City: KANSAS CIT State: MO Channel: 42 km:261.8 mi:162.7 bear:147.5			
Undesired Station 5 Name: DKIMT Station Type: HDTV			
City: MASON CITY State: IA Channel: 42 km:378.6 mi:235.2 bear: 46.4			
Stations that actually do contribute to interference.			
Name NTSC Int Nonmasked HDTV Int Population Total Area of Int Popu			
lation			

6.71 sq km .00 sq km 12. 6.71 sq km

Population breakdown by State and County

KPTM

12.

Contour 1	Signal	below minimum	
STATE = IA	5	POPULATION	AREA(km)
Adair County		6833.	1354.85
Adams County		4303.	
Audubon County		6622.	
Boone County		114.	32.83
Buena Vista County		4285.	303.57
Calhoun County		10209.	1379.81
Carroll County		21102.	1396.21
Cass County		12139.	1166.69
Cherokee County		1471.	320.99
Crawford County		16433.	1755.16
Dallas County		3433.	390.66
Greene County		10285.	1529.37
Guthrie County		12979.	1631.72
Harrison County		18.	10.53
Humboldt County		0.	1.24
Ida County		7843.	1078.75
Madison County		1705.	362.78
Monona County		8616.	1326.64
Montgomery County		1988.	249.46
Page County		6604.	392.15
Plymouth County		4521.	453.23
Pocahontas County		2402.	383.95
Pottawattamie Count	У	16.	9.16

Ringgold County	4125.	947.01
Sac County	12115.	
Shelby County	4533.	
Taylor County	7098.	
Union County	11453.	
Webster County	33050.	
Woodbury County	91064.	
State total =		07361. 26732.66
STATE = KS	POPULATION	AREA(km)
Atchison County	14160.	·
Brown County	10676.	1344.28
Clay County	294.	224.99
Cloud County	8084.	785.70
Doniphan County	6449.	945.69
Jackson County	1969.	
Jewell County		1495.42
Marshall County	10857.	2177.73
Mitchell County	416.	270.10
Nemaha County	10310.	1885.54
Pottawatomie County	1255.	
Republic County	6090.	
Riley County	270.	204.11
Washington County	6987.	2397.88
State total =	-	80974. 15050.10
STATE = MO	POPULATION	AREA(km)
Andrew County	14456.	1055.36
Atchison County	1447.	434.86
Buchanan County	83475.	1057.21
Caldwell County	774.	132.17
Clinton County	10842.	
Daviess County	694.	174.56
DeKalb County	15598.	1117.78
Gentry County	6961.	1264.51
Harrison County	924.	370.66
Holt County	5416.	1211.88
Nodaway County	21720.	2283.05
Platte County	3121.	229.48
Ray County	323.	28.29
Worth County	2503.	772.88
<pre>State total =</pre>	168254. 11032.83	
STATE = NE	POPULATION	AREA(km)
Adams County	168.	72.69
Antelope County	6945.	2039.94
Boone County	6326.	1645.23
Burt County	570.	94.48
Butler County	6.	.82
Cedar County	6565.	1071.15
Clay County	C022	4 4 4 4 4 4 4
	6833.	1383.40
Colfax County Cuming County	6833. 742. 4240.	61.12 793.88

```
25912.
                                                     632.02
  Dakota County
                                          3235. 1046.65
6841. 1467.00
4253. 888.36
  Dixon County
  Fillmore County
  Gage County
                                       44. 83.11

455. 57.15

9571. 1408.56

79. 66.49

74. 31.24

8284. 1433.62

5983. 1495.41

33113. 1421.67

8980. 1243.77

4472. 1211.55

5. 4.42

5302. 1498.31

1893. 587.40

8162. 1551.09

10804. 1557.50

4719. 887.80

8525. 1266.57

1342. 527.13

6927. 1099.88

6358. 1564.54

8148. 1059.75

10632. 1264.96

115. 123.92
                                                      83.11
  Greeley County
                                            44.
  Hall County
  Hamilton County
  Holt County
  Howard County
  Jefferson County
  Knox County
  Madison County
  Merrick County
  Nance County
  Nemaha County
  Nuckolls County
  Pawnee County
  Pierce County
  Platte County
  Polk County
  Richardson County
  Saline County
  Stanton County
  Thayer County
  Thurston County
  Wayne County
                                           115.
                                                     123.92
  Webster County
                                              1.
                                                       22.63
  Wheeler County
                                          13559. 1286.83
  York County
                                                230177. 33952.06
  State total =
                                  POPULATION AREA(km)
 STATE = SD
                                                    285.61
  Union County
                                         8955.
                                                8955. 285.61
  State total =
Total Population/Area for this contour:
                                                         795721. 88488.68
                 Interference
Contour 2
                              POPULATION
                                                     AREA(km)
 STATE = IA
                                                          .55
  Fremont County
                                               1.
                                                          2.16
                                               7.
  Harrison County
                                                         .81
                                               1.
  Monona County
  Pottawattamie County
                                               1.
                                                          .81
                                                                4.33
                                                     10.
  State total =
                                POPULATION
                                                     AREA(km)
 STATE = MO
                                                      1.10
  Atchison County
                                                                 1.10
                                                     0.
  State total =
                                                     AREA(km)
 STATE = NE
                                  POPULATION
                                                     1.08
  Colfax County
                                               3.
                                                      3.
                                                                1.08
  State total =
                                                                            6.52
                                                                14.
Total Population/Area for this contour:
```

```
No Interference
Contour 3
                             POPULATION
                                         AREA(km)
 STATE = IA
                                             302.74
                                   2514.
 Cass County
                                     56.
                                             19.69
  Crawford County
                                   5538.
                                            1212.74
  Fremont County
                                  14731.
                                            1617.56
  Harrison County
                                            1066.84
                                  14816.
 Mills County
                                  1192.
                                            427.15
 Monona County
                                  9979.
                                            901.82
 Montgomery County
                                            881.12
                                  9882.
  Page County
                                            2500.98
                                  79594.
  Pottawattamie County
                                   8877.
                                            789.86
  Shelby County
                                                  9720.51
                                       147179.
  State total =
                             POPULATION
                                           AREA (km)
 STATE = MO
                                            897.55
                                   6935.
  Atchison County
                                              21.92
  Nodaway County
                                                   919.47
                                         7021.
  State total =
                             POPULATION
                                          AREA (km)
 STATE = NE
                                            1104.07
                                  7172.
  Burt County
                                           1366.49
                                   8275.
  Butler County
                                  20992.
                                            1347.59
  Cass County
                                  9659.
                                           948.15
  Colfax County
                                   5702.
                                            681.05
  Cuming County
                                  34628.
                                            1320.57
  Dodge County
                                            824.40
                                 423143.
  Douglas County
                                 18284.
                                            1246.59
  Gage County
                                     81.
                                             22.00
  Jefferson County
                                  4432.
                                            890.13
                                 4432. 890.13
232607. 2121.13
  Johnson County
  Lancaster County
                                            972.61
  Nemaha County
                                   7612.
                                  15375. 1729.60
  Otoe County
                                            594.14
  Pawnee County
                                  1454.
                                            215.79
                                  20648.
  Platte County
                                   1252.
                                            308.56
  Polk County
                                            288.93
                                   1330.
  Richardson County
                                            940.21
  Saline County
                                 11393.
                                 143760.
                                            729.22
  Sarpy County
                                         729.22
2099.47
1542.80
  Saunders County
                                 20150.
                                  16924.
  Seward County
                                              38.82
                                     59.
  Stanton County
 Washington County
                                  19428.
                                           1167.01
                                   1051.
                                            274.73
  York County
                                      1025411. 22774.06
  State total =
                                               1179610. 34007.60
Total Population/Area for this contour:
 Signal below minimum
        88490. sq km
              796000.
 Population:
 Households:
               281000.
 Interference
 Area:
         10. sq km
```

TABLE 1.1 (a) Cont'd

Population: 0. Households: 0.

No Interference

Area: 34010. sq km
Population: 1180000.
Households: 405000.